

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE RELATIONSHIP BETWEEN SAFETY
MANAGEMENT PRACTICES AND SAFETY
PERFORMANCE IN UNIVERSITY OF MALAYA
MEDICAL CENTRE**

NURUL HAFIZAH KAMALIAH BT MOHD JAMIL



**MASTER OF SCIENCE
UNIVERSITI UTARA MALAYSIA
DECEMBER 2019**

**THE RELATIONSHIP BETWEEN SAFETY MANAGEMENT PRACTICES
AND SAFETY PERFORMANCE IN
UNIVERSITY OF MALAYA MEDICAL CENTRE**

By

NURUL HAFIZAH KAMALIAH BT MOHD JAMIL



**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfilment of the Requirement for the Master of Science (Occupational
Safety and Health Management)**



**Pusat Pengajian Pengurusan
Perniagaan**

SCHOOL OF BUSINESS MANAGEMENT

Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN

(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa

(I, the undersigned, certified that)

NURUL HAFIZAH KAMALIAH BT MOHD JAMIL (823572)

Calon untuk Ijazah Sarjana

(Candidate for the degree of)

MASTER OF SCIENCE (OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT)

telah mengemukakan kertas penyelidikan yang bertajuk

(has presented his/her research paper of the following title)

**THE RELATIONSHIP BETWEEN SAFETY MANAGEMENT PRACTICES AND SAFETY
PERFORMANCE IN UNIVERSITY OF MALAYA MEDICAL CENTRE**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.

(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).

Nama Penyelia
(Name of Supervisor)

: **PROF. MADYA DR. MUNAUWAR BIN MUSTAFA**

Tandatangan
(Signature)

Tarikh
(Date)

: **8 DISEMBER 2019**

PERMISSION TO USE

In presenting this dissertation in partial fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library make a freely available for inspection. I further agree that permission for copying of this dissertation in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor or, in their absence by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation. It is understood that any copying or publication or use of this dissertation or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia in any scholarly use which may be made of any material in my dissertation.

Request for permission to copy or make other use of materials in this dissertation, in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman



ABSTRACT

Safety management practices play a vital role in reducing accident in the workplace by improving working conditions and positively influence both employers and employee's performance towards safety and health. This study examined the perception of clinical nurses in University of Malaya Medical Centre located in Lembah Pantai, Kuala Lumpur on four safety management practices namely management commitment, safety training, workers' participation and safety communication and feedback with safety performance using questionnaires among 210 nurses. A cross-sectional study design was conducted using cluster sampling technique. Descriptive statistics, reliability test, Pearson Correlation and Multiple Correlation were used to analyse the data. Data analysed from this study revealed that Management Commitment, Safety Training, Workers' Participation and Safety Communication and Feedback are factors that have significant correlation with Safety Performance. Safety Training and Safety Communication and Feedback have significant influence towards Safety Performance. Management Commitment and Workers' Participation do not have significant influence on Safety Performance in this organization even though they have a significant correlation. Understanding the dimensions of safety management practices that can influence safety performance in the hospital organization is the first step before further developing effective strategies to manage the safety and health problems. Enforcement of policies, establishing a continuous training program, strengthening the management commitment and encouraging workers participation in safety could enhance workplace safety especially among clinical nurses.

Keywords: Management Commitment, Safety Training, Workers' Participation and Safety Communication and Feedback and Safety Performance.

ABSTRAK

Amalan pengurusan keselamatan memainkan peranan yang amat penting dalam mengurangkan kadar kemalangan di tempat kerja dengan mempertingkatkan persekitaran kerja dan mempengaruhi prestasi pekerja dan majikan dalam aspek keselamatan dan kesihatan. Kajian ini adalah bertujuan untuk mengkaji persepsi jururawat-jururawat yang berkhidmat di Pusat Perubatan Universiti Malaya, Lembah Pantai, Kuala Lumpur ke atas empat faktor amalan pengurusan keselamatan seperti Komitmen Majikan, Latihan Keselamatan, Penglibatan Pekerja dan Komunikasi dan Maklumbalas Keselamatan dengan Prestasi Keselamatan menggunakan kaedah soal selidik ke atas 210 orang jururawat. Kajian keratan rentas telah dijalankan menggunakan teknik pensampelan kluster. Statistik deskriptif, ujian kebolehpercayaan, Korelasi Pearson dan Korelasi Pelbagai digunakan untuk menganalisis data. Hasil kajian menunjukkan bahawa Komitmen Majikan, Latihan Keselamatan, Penglibatan Pekerja dan Komunikasi dan Maklumbalas Keselamatan mempunyai hubungan yang signifikan dengan Prestasi Keselamatan. Latihan Keselamatan dan Komunikasi dan Maklumbalas Keselamatan mempunyai pengaruh yang signifikan terhadap Prestasi Keselamatan di dalam organisasi ini. Juga didapati Komitmen Majikan dan Penglibatan Pekerja tidak mempunyai pengaruh yang signifikan terhadap Prestasi Keselamatan di dalam organisasi ini walaupun terdapat korelasi yang signifikan. Memahami dimensi amalan pengurusan keselamatan yang boleh mempengaruhi prestasi keselamatan di organisasi hospital adalah langkah pertama sebelum membangunkan strategi yang berkesan untuk menguruskan masalah keselamatan dan kesihatan. Penguatkuasaan dasar, mewujudkan program latihan yang berterusan, mengukuhkan komitmen pengurusan dan menggalakkan penyertaan pekerja dalam keselamatan dapat meningkatkan keselamatan tempat kerja terutama di kalangan jururawat klinikal.

Kata kunci: Komitmen Majikan, Latihan Keselamatan, Penglibatan Pekerja, Komunikasi dan Maklumbalas Keselamatan dan Prestasi Keselamatan

ACKNOWLEDGEMENT

The power of determination is what kept me going throughout this study, and I am deeply appreciate for all those who were a part of this study, directly or indirectly. I believe in the presence of Allah SWT whom I trust for blessings, direction and guidance.

First, I would like to take this opportunity to express my deepest gratitude to my supervisor, Prof. Madya Dr. Munauwar bin Mustafa for his support, advices and guidance in throughout this project. His wisdom, knowledge and commitment to the highest standards inspired, motivated and encouraged me to accomplish this study.

I am deeply thankful to my beloved parents, Mohd Jamil bin Abdullah and Nor Zahati binti Hassan for always motivating me to study at this level. No words or deeds can pay back all that they have done and all their support for me. I owe a special debt of gratitude to my brothers and family for their love, motivation, support, patience and for standing by me through the toughest moments in this study that has resulted in this project paper.

I would like to thank the management of University of Malaya Medical Centre for the consent and staff nurses involved in this hospital for their cooperation to carry out this study. Last but not least, I would like to thank all my course mates and friends who have provided morale support and guidance to me for completing this project.



TABLE OF CONTENTS

TITLE PAGE	i
CERTIFICATION OF THESIS WORK	ii
PERMISSION TO USE	iii
ABSTRACT	iv
ABSTRAK	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii
 CHAPTER 1: INTRODUCTION	 1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Problem Statement	8
1.4 Research Objectives	11
1.5 Research Questions	12
1.6 Significance of the Study	13
1.7 Research Scope	14
1.8 Thesis arrangement	15
1.9 Summary	16
 CHAPTER 2: LITERATURE REVIEW	 17
2.1 Introduction	17
2.2 Safety Performance	17
2.2.1 Safety Compliance	19
2.2.2 Safety Participation	20
2.3 Safety Management Practices	21
2.4 Management Commitment	22
2.5 Safety Training	24

2.6	Safety Communication and Feedback	26
2.7	Workers Participation.....	27
2.8	Previous Studies on The Relationship between Safety Management Practices and Safety Performance	29
2.8.1	Management Commitment and Safety Performance	29
2.8.2	Safety Training and Safety Performance	31
2.8.3	Safety Communication and Feedback and Safety Performance	33
2.8.4	Workers Participation and Safety Performance	35
2.9	Summary	36
CHAPTER 3: RESEARCH METHODOLOGY		37
3.1	Introduction	37
3.2	Theoretical Framework	37
3.3	Conceptual or Operational Definitions	38
3.3.1	Safety Performance	39
3.3.2	Safety Management Practices.....	39
3.3.3	Management Commitment.....	40
3.3.4	Workers Participation	40
3.3.5	Safety Training.....	40
3.3.6	Safety Communication and Feedback	41
3.4	Hypotheses of The Study	41
3.4.1	Management Commitment and Safety Performance.....	41
3.4.2	Safety Training and Safety Performance	42
3.4.3	Workers Participation and Safety Performance	43
3.4.4	Safety Communication and Feedback and Safety Performance	43
3.4.5	Management Commitment, Safety Training, Safety Communication and Feedback, Workers Participation influence Safety Performance.	44
3.5	Research Design	45
3.5.1	Purpose of Research.....	46
3.5.2	Nature of the Research.....	47
3.6	Population, Sample and Sampling Technique.....	47
3.6.1	Population	48
3.6.2	Sample Size.....	48

3.6.3	Sampling Technique	49
3.7	Data Collection.....	50
3.8	Measurement of Variables or Instrumentation.....	51
3.8.1	Questionnaire Design.....	51
3.8.2	Selection of Survey Instrument.....	52
3.8.3	Translation of the Questionnaires	53
3.9	Pilot Study	54
3.10	Data Analysis	54
3.11	Summary	56
CHAPTER 4: ANALYSIS AND FINDINGS		57
4.1	Introduction	57
4.2	Response Rate	57
4.3	Normality Test.....	58
4.4	Descriptive Statistics of Respondent's Demographic Characteristics	59
4.5	Reliability Analysis.....	62
4.6	Descriptive Statistics of Variables	63
4.7	Correlation Analysis.....	66
4.7.1	Relationship between Management Commitment and Safety Performance. 67	
4.7.2	Relationship between Safety Training and Safety Performance.....	68
4.7.3	Relationship between Workers Participation and Safety Performance.	68
4.7.4	Relationship between Safety Communication and Feedback and Safety Performance	68
4.8	Regression Analysis	69
4.8.1	The influence of Safety Management Practices and Safety Performance. .	71
4.9	Summary	72

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	73
5.1 Introduction	73
5.2 Discussion	73
5.2.1 Management Commitment and Safety Performance	74
5.2.2 Safety Training and Safety Performance	76
5.2.3 Workers Participation and Safety Performance	79
5.2.4 Safety Communication and Feedback and Safety Performance.	81
5.3 Implications	84
5.3.1 Theoretical Implications	84
5.3.2 Practical Implications.....	85
5.4 Limitations and Suggestions for Future Research.....	89
5.5 Conclusions	91
REFERENCES	92



LIST OF TABLES

Table 3. 1: Sources of Survey Instrument.....	51
Table 4. 1: Response Rate of the Survey	58
Table 4. 2: Normality Test Statistics of The Variables.....	59
Table 4. 3: Demographic Characteristics of the Respondents	60
Table 4. 4: Cronbach's Alphas of the Study Variables.....	63
Table 4. 5: Results of Descriptive Statistics of Variables	65
Table 4. 6: Results of Descriptive Statistics of All Dimensions.....	66
Table 4. 7: Correlation Result.....	66
Table 4. 8: Detailed Correlation Result	67
Table 4. 9: Regression Result	69
Table 4. 10: Detailed Regression Result.....	70
Table 4. 11: Hypotheses Results.....	72

LIST OF FIGURES

Figure 3. 1: Theoretical Framework of The Present Study.....	38
--	----



LIST OF ABBREVIATIONS

OSH	Occupational Safety and Health
ILO	International Labour Organization
OSHA 1994	Occupational Safety and Health Act 1994
DOSH	The Department of Occupational Safety and Health
NIOSH	National Institute of Occupational Safety and Health
UMMC	University of Malaya Medical Centre
R&D	Research and Development
WHO	World Health Organization
SPSS	Statistical Package for The Social Science
PPE	Personal Protective Equipment
JSA	Job Safety Analysis
LTI	Lost Time Injury
LTFR	Lost-time frequency rates

CHAPTER 1

INTRODUCTION

1.1 Introduction

This section hand over an introduction and overview of the study. At first, it will give an extensive overview of the framework of the current research, then it will proceed to portray the research background that directed to the formulation of the research aim and research objectives. The justification of conducting this current study is then pondered and lastly the research structure is delineated.

1.2 Background of the Study

Multiple companies have begun to focus and integrate Occupational Safety and Health (OSH) as one of the components of increasing productivity and integrity, as well as complimenting on quality in effort to keep continuous life. Malaysia's rapid economic evolution not only possess a substantial effect on earnings distribution and quality of life, but has also led to the expansion of overall workplace accidents (Maran, 2016).

Occupational safety and health within the entrepreneurial sector, such as the construction industry, is a major concern due to its operation associated with various risks and threats, weather conditions and various construction tasks (Maran, 2016). Due to the massive workplace hazards and risks, the Government of Malaysia developed the Occupational Safety and Health Act (OSHA) 1994, which provides for self-regulation for employers, employees and self-employed personnel to be responsible for their health and safety at work. The adoption of OSHA 1994 made all Malaysian companies identify hazards and threats, organize risk assessment, and handle then monitor risks. Employers, employees

REFERENCES

- Abdullah, N. A. C., Spickett, J. T., Rumchev, K. B., & Dhaliwal, S. S. (2009). Assessing employees perception on health and safety management in public hospitals. *International Review of Business Research Papers*, 5(4), 54-72.
- Adams, J. M., Zimmermann, D., Cipriano, P. F., Pappas, S., & Batcheller, J. (2018). Improving the work life of health care workers: Building on nursing's experience. *Medical care*, 56(1), 1-3.
- Agwu, M. O. (2012). Impact of employees safety culture on organisational performance in shell bonny terminal integrated project (BTIP). *European Journal of Business and Social Sciences*, 1(5), 70-82.
- Ali, H., Azimah Chew Abdullah, N., & Subramaniam, C. (2009). Management practice in safety culture and its influence on workplace injury: An industrial study in Malaysia. *Disaster Prevention and Management: An International Journal*, 18(5), 470-477.
- Andersen, L. P., Nørdam, L., Joensson, T., Kines, P., & Nielsen, K. J. (2018). Social identity, safety climate and self-reported accidents among construction workers. *Construction Management and Economics*, 36(1), 22-31.
- Andi, A. (2008). Construction workers perceptions toward safety culture. *Civil Engineering Dimension*, 10(1), 1-6.
- Azir, S. (2010). Safety behavior in the Malaysian petrochemical industry (Doctoral dissertation, Universiti Utara Malaysia).
- Bakri, A., Zin, R. M., Misnan, M. S., & Mohammed, A. H. (2006). Occupational safety and health (OSH) management systems: Towards development of safety and health culture. In *Proceedings of the 6th Asia-Pacific Structural Engineering and Construction Conference* (pp. 19-28).
- Barbaranelli, C., Petitta, L., & Probst, T. M. (2015). Does safety climate predict safety performance in Italy and the USA? Cross-cultural validation of a theoretical model of safety climate. *Accident Analysis & Prevention*, 77, 35-44.
- Becker, P., & Morawetz, J. (2004). Impacts of health and safety education: Comparison of worker activities before and after training. *American Journal of Industrial Medicine*, 46(1), 63-70.
- Beus, J. M., McCord, M. A., & Zohar, D. (2016). Workplace safety: A review and research synthesis. *Organizational Psychology Review*, 6(4), 352-381.
- Bhatnagar, A., Gupta, S., Alonge, O., & George, A. S. (2017). Primary health care workers' views of motivating factors at individual, community and organizational levels: a qualitative study from Nasarawa and Ondo states, Nigeria. *The International Journal of Health Planning and Management*, 32(2), 217-233.

- Biggs, H. C., Sheahan, V. L., & Dingsdag, D. P. (2005). A study of construction site safety culture and implications for safe and responsive workplaces. *The Australian Journal of Rehabilitation Counselling*, 11(1), 1-7.
- Brotfain, E., Livshiz-Riven, I., Gushansky, A., Erblat, A., Koyfman, L., Ziv, T., & Borer, A. (2017). Monitoring the hand hygiene compliance of health care workers in a general intensive care unit: Use of continuous closed circle television versus overt observation. *American Journal of Infection Control*, 45(8), 849-854.
- Bryman, A., & Bell, E. (2011). Ethics in business research. *Business Research Methods*, 7(5), 23-56.
- Burke, M. J., & Sarpy, S. A. (2003). Improving worker safety and health through interventions. *Health and Safety in Organizations*, 56-90.
- Burke, M. J., Sarpy, S. A., Smith-Crowe, K., Chan-Serafin, S., Salvador, R. O., & Islam, G. (2006). Relative effectiveness of worker safety and health training methods. *American Journal of Public Health*, 96(2), 315-324.
- Burns, N., & Grove, S. K. (2005). Using statistics to examine relationships. *Burns N, Grove SK, eds The Practice of Nursing Research: Conduct, Critique and Utilization 5th ed St Louis, MO: Elsevier*, 486-700.
- Camuffo, A., De Stefano, F., & Paolino, C. (2017). Safety reloaded: Lean operations and high involvement work practices for sustainable workplaces. *Journal of Business Ethics*, 143(2), 245-259.
- Chang, L. S. (2012). A study to investigate the influence of work safety scale on compliance with safety behavior among foreign workers in construction industry (Doctoral dissertation, Universiti Utara Malaysia).
- Chinda, T. (2011). The use of safety assessment approach in improving safety: Case studies. *Journal of Engineering, Project, and Production Management*, 20-21.
- Choudhry, R. M., Fang, D., & Lingard, H. (2009). Measuring safety climate of a construction company. *Journal of Construction Engineering and Management*, 135(9), 890-899.
- Cohen, A., Colligan, M. J., Sinclair, R., Newman, J., & Schuler, R. (1998). Assessing occupational safety and health training. *Cincinnati, OH: National Institutes of Health*, 1-174.
- Cohen, J. M. (2002). Measuring safety performance in construction. *Occupational Hazards*, 64(6), 41-44.
- Cooper, D. R., & Schindler, P. S. (2008). International edition: Business research methods. *New Delhi: MacGraw-Hill*.
- Cooper, M. D. (2009). Behavioral safety interventions a review of process design factors. *Professional Safety*, 54(02).

- Cooper, D. (2015). Effective safety leadership: Understanding types & styles that improve safety performance. *Professional Safety*, 60(02), 49-53
- Cox, S. J., & Cheyne, A. J. T. (2000). Assessing safety culture in offshore environments. *Safety science*, 34(1-3), 111-129.
- Dababneh, A., Fouad, R. H., & Majeed, A. J. H. (2018). Assessment of occupational safety and health performance indicators for Jordan. *Journal of Fundamental and Applied Sciences*, 10, 162-169.
- Dessler, G. (2011). *Fundamentals of Human Resource Management*. Pearson Higher Ed.
- Díaz-Cabrera, D., Hernandez-Fernaund, E., & Isla-Díaz, R. (2007). An evaluation of a new instrument to measure organisational safety culture values and practices. *Accident Analysis & Prevention*, 39(6), 1202-1211.
- Doane, D. P., & Seward, L. E. (2011). Measuring skewness: a forgotten statistic? *Journal of Statistics Education*, 19(2).
- Ekenes, J. M. (2001). Effective safety training programs for aluminium cast shops. *JOM*, 53(11), 14-15.
- Erdogan, B., Ozyilmaz, A., Bauer, T. N., & Emre, O. (2018). Accidents happen: Psychological empowerment as a moderator of accident involvement and its outcomes. *Personnel Psychology*, 71(1), 67-83.
- Fernández-Muñiz, B., Montes-Peón, J. M., & Vázquez-Ordás, C. J. (2009). Relation between occupational safety management and firm performance. *Safety Science*, 47(7), 980-991.
- Fernando, Y., Zailani, S., & Janbi, L. (2008). The determinant factors of safety compliance at petrochemical processing area: Moderator effects of employees experience and engineering background. In *9th Asia Pacific Industrial Engineering and Management Systems Conference* (pp. 1442-1452).
- Flin, R., Mearns, K., O'Connor, P., & Bryden, R. (2000). Measuring safety climate: Identifying the common features. *Safety Science*, 34(1-3), 177-192.
- Flin, R. (2007). Measuring safety culture in healthcare: A case for accurate diagnosis. *Safety Science*, 45(6), 653-667.
- Ford, M. T., & Tetrick, L. E. (2011). Relations among occupational hazards, attitudes, and safety performance. *Journal of Occupational Health Psychology*, 16(1), 48.
- Garrett, R. B., & Perry, A. J. (1996). A safer way to move patients. *Occupational Health & Safety (Waco, Tex.)*, 65(9), 60.
- Geldart, S., Smith, C. A., Shannon, H. S., & Lohfeld, L. (2010). Organizational practices and workplace health and safety: A cross-sectional study in manufacturing companies. *Safety Science*, 48(5), 562-569.

- Geller, E. S. (2001). Behavior-based safety in industry: Realizing the large-scale potential of psychology to promote human welfare. *Applied and Preventive Psychology*, 10(2), 87-105
- Gibb, A., Lingard, H., Behm, M., & Cooke, T. (2014). Construction accident causality: learning from different countries and differing consequences. *Construction Management and Economics*, 32(5), 446-459.
- Glendon, A. I., & Litherland, D. K. (2001). Safety climate factors, group differences and safety behaviour in road construction. *Safety Science*, 39(3), 157-188.
- Geotsch, D. L. (2008). Occupational Safety and Health for Technologist. *Pearson Education International, London, ISBN-10, 136157556, 255-257.*
- Goetsch, D. L. (2010). *Occupational Safety and Health*. Pearson India.
- Goetsch, D. L. (2015). *Occupational Safety and Health for Technologists*. Pearson Education Limited.
- Gordon, R., Flin, R., & Mearns, K. (2005). Designing and evaluating a human factors investigation tool (HFIT) for accident analysis. *Safety Science*, 43(3), 147-171.
- Griffin, M. A., & Curcuruto, M. (2016). Safety climate in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 191-212.
- Griffin, M. A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5(3), 347.
- Griffin, T. G., Young, M. S., & Stanton, N. A. (2017). *Human Factors Models for Aviation Accident Analysis and Prevention*. CRC Press.
- Guldenmund, F., Cleal, B., & Mearns, K. (2013). An exploratory study of migrant workers and safety in three European countries. *Safety Science*, 52, 92-99.
- Gunduz, M., & Laitinen, H. (2018). Observation based safety performance indexing method for construction industry-validation with SMEs. *KSCE Journal of Civil Engineering*, 22(2), 440-446.
- Hale, A. R., Guldenmund, F. W., Van Loenhout, P. L. C. H., & Oh, J. I. H. (2010). Evaluating safety management and culture interventions to improve safety: Effective intervention strategies. *Safety Science*, 48(8), 1026-1035.
- Hämäläinen, P., Takala, J., & Kiat, T. B. (2017). Global estimates of occupational accidents and work-related illnesses 2017. *World*, 2017, 3-4.
- Harvey, J., Erdos, G., Bolam, H., Cox, M. A., Kennedy, J. N., & Gregory, D. T. (2002). An analysis of safety culture attitudes in a highly regulated environment. *Work & Stress*, 16(1), 18-36.
- Hashem, A., Omar, R., & Yahya, M. Y. (2013). The factors affecting the implementation of safety and health practices in the Libyan Construction Sites.

- Hsu, S. H., Lee, C. C., Wu, M. C., & Takano, K. (2008). A cross-cultural study of organizational factors on safety: Japanese vs. Taiwanese oil refinery plants. *Accident Analysis & Prevention*, 40(1), 24-34.
- Huang, Y. H., Ho, M., Smith, G. S., & Chen, P. Y. (2006). Safety climate and self-reported injury: Assessing the mediating role of employee safety control. *Accident Analysis & Prevention*, 38(3), 425-433.
- Hughes, P. W., & Ferrett, E. D. (2005). *Introduction to Health and Safety in Construction*. Oxford: Elsevier Butterworth-Heinemann.
- International Labour Organization (2017). Snapshots on Occupational Safety and Health (OSH). Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/meetingdocument/wcms_572867.pdf.
- Jervis, S., & Collins, T. R. (2001). Measuring safety's return on investment. *Professional Safety*, 46(9), 18.
- Jin, X., Villari-Kohlert, R., Senaratne, S., Feng, Y., & Zuo, J. (2015). Exploring safety communication patterns in small work groups in the construction industry: A theoretical framework. *Proceedings CIB W099: Benefitting Workers and Society through Inherently Safe (r) Construction, 9-11 September, 2015, Belfast, Northern Ireland*, 113-121.
- Jumain, N. A., & Abdullah, H. (2014). Relationship between safety management practices and safety performance in defence industry. *ZULFAQAR International Journal of Politics, Defence and Security*, 1(2).
- Keffane, S., & Delhomme, P. (2013). Assessing the mediating role of communication in safety management and performance for road safety practices: French organizations model. *Proceedings Book*, 26.
- Khairiah, S. (2008). Workers' participation in safety and health at work. *Jurnal Kemanusiaan*, 6(1).
- Khan, M.K. (2003). Determinants of occupational safety and health performance in small and medium manufacturing settings. (Unpublished doctoral thesis). Universiti Utara Malaysia.
- Khdair, W. A. (2013). The moderating effect of personality traits on the relationship between management practices, leadership styles and safety performance in Iraq (Doctoral dissertation, Universiti Utara Malaysia).
- Khraisat, F. S., Juni, M. H., Rahman, A. A., & Said, S. M. (2014). Needlestick and sharp injuries among healthcare workers in hospitals: A mini-systematic review. *Int J Clinic Med Res*, 1, 151-60.
- Labodová, A. (2004). Implementing integrated management systems using a risk analysis-based approach. *Journal of Cleaner Production*, 12(6), 571-580.

- Langford, D., Rowlinson, S., & Sawacha, E. (2000). Safety behaviour and safety management: Its influence on the attitudes of workers in the UK construction industry. *Engineering, Construction and Architectural Management*, 7(2), 133-140.
- Laurent, J., Chmiel, N., & Hansez, I. (2017). Perceived management commitment to safety and safety behaviors: The moderating role of trust and support.
- Lauver, K. J., & Lester, S. W. (2007). Get safety problems to the surface: Using human resource practices to improve injury reporting. *Journal of Leadership & Organizational Studies*, 14(2), 168-179.
- Lee, T., & Harrison, K. (2000). Assessing safety culture in nuclear power stations. *Safety Science*, 34(1-3), 61-97.
- Lin, J., & Mills, A. (2001). Measuring the occupational health and safety performance of construction companies in Australia. *Facilities*, 19(3/4), 131-139.
- Lingard, H. C., Cooke, T., & Blismas, N. (2010). Safety climate in conditions of construction subcontracting: a multi-level analysis. *Construction Management and Economics*, 28(8), 813-825.
- Lori, J. R., McCullagh, M. C., Krueger, A., & Oteng, R. (2016). Sharps injuries among emergency department nurses in one tertiary care hospital in Ghana. *International Emergency Nursing*, 28, 14-19.
- Lu, C. S., & Yang, C. S. (2010). Safety leadership and safety behavior in container terminal operations. *Safety Science*, 48(2), 123-134.
- Lunau, T., Dragano, N., Siegrist, J., & Wahrendorf, M. (2017). Country differences of psychosocial working conditions in Europe: the role of health and safety management practices. *International Archives of Occupational and Environmental Health*, 90(7), 629-638.
- Ma, Q., & Yuan, J. (2009). Exploratory study on safety climate in Chinese manufacturing enterprises. *Safety Science*, 47(7), 1043-1046.
- Mansur, M., & Peng, H. S. (2009). Effectiveness of occupational safety and health training in reducing accidents at work place. *PERKEM IV. Malaysia: Persidangan Kebangsaan Ekonomi Malaysia (PERKEM IV)*, 293-324.
- Maran, K. (2016). Safety management practices and safety behaviour among employees in steel fabrication construction company (Doctoral dissertation, Universiti Utara Malaysia).
- Marín, L. S., Lipscomb, H., Cifuentes, M., & Punnett, L. (2017). Associations between safety climate and safety management practices in the construction industry. *American Journal of Industrial Medicine*, 60(6), 557-568.
- Martins, A., Coelho, A. C., Vieira, M., Matos, M., & Pinto, M. L. (2012). Age and years in practice as factors associated with needlestick and sharps injuries among health care workers in a Portuguese hospital. *Accident Analysis & Prevention*, 47, 11-15.

- Mashi, M. S. (2014). Moderating effect of consideration of future safety consequences on the relationship between safety management practices and safety performance among health care workers: A conceptual analysis. *International Journal of Academic Research in Business and Social Sciences*, 4(6), 402.
- McFadden, K. L., Stock, G. N., & Gowen III, C. R. (2015). Leadership, safety climate, and continuous quality improvement: Impact on process quality and patient safety. *Health Care Management Review*, 40(1), 24-34.
- Mearns, K., Whitaker, S. M., & Flin, R. (2003). Safety climate, safety management practice and safety performance in offshore environments. *Safety Science*, 41(8), 641-680.
- Mooren, L., Grzebieta, R., Williamson, A., Olivier, J., & Friswell, R. (2014). Safety management for heavy vehicle transport: A review of the literature. *Safety Science*, 62, 79-89.
- Mullen, J., Kelloway, E. K., & Teed, M. (2017). Employer safety obligations, transformational leadership and their interactive effects on employee safety performance. *Safety Science*, 91, 405-412.
- Namian, M., Albert, A., Zuluaga, C. M., & Behm, M. (2016). Role of safety training: Impact on hazard recognition and safety risk perception. *Journal of Construction Engineering and Management*, 142(12), 04016073.
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2008). A meta-analytic investigation of individual and contextual influences on workplace safety, satisfaction, and well-being. *Society for Industrial and Organizational Psychology, San Francisco*.
- Namian, M., Albert, A., Zuluaga, C. M., & Behm, M. (2016). Role of safety training: Impact on hazard recognition and safety risk perception. *Journal of Construction Engineering and Management*, 142(12), 04016073.
- Neal, A., Griffin, M. A., & Hart, P. M. (2000). The impact of organizational climate on safety climate and individual behavior. *Safety Science*, 34(1-3), 99-109.
- Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946.
- Neal, A., & Griffin, M. A. (2002). Safety climate and safety behaviour. *Australian Journal of Management*, 27(1_suppl), 67-75.
- Ng, S. T., Cheng, K. P., & Skitmore, R. M. (2005). A framework for evaluating the safety performance of construction contractors. *Building and Environment*, 40(10), 1347-1355.
- Nielsen, K. T. (2000). Organization theories implicit in various approaches to OHS management. In *Systematic Occupational Health and Safety Management* (pp. 99-123). Pergamon Press.
- Omar, D., Nazli, S. N., & Karuppannan, S. (2018). Clinical Waste Management in Malaysia. *Journal of ASIAN Behavioural Studies*, 3(7), 11-18.

- O'Connor, T., Loomis, D., Runyan, C., dal Santo, J. A., & Schulman, M. (2005). Adequacy of health and safety training among young Latino construction workers. *Journal of Occupational and Environmental Medicine*, 47(3), 272-277.
- Pallant, J., & Manual, S. S. (2007). A step by step guide to data analysis using SPSS for windows. In *SPSS Survival Manual*. Open University Press.
- Pandey, S. K., & Garnett, J. L. (2006). Exploring public sector communication performance: Testing a model and drawing implications. *Public Administration Review*, 66(1), 37-51.
- Paul, J., & Dhas, A. (2014). Predictors of safety compliance among the manufacturing employees in penfabric mill 4 (Doctoral dissertation, Universiti Utara Malaysia).
- PERKESO. (2018). *Annual Reports*. Retrieved from <http://www.perkeso.gov.my/en/report/annual-reports.html>
- Picakciefe, M., Acar, G., Colak, Z., & Kilic, I. (2017). The relationship between sociodemographic characteristics, work conditions, and level of "mobbing" of health workers in primary health care. *Journal of Interpersonal Violence*, 32(3), 373-398.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Pousette, A., Larsman, P., Eklöf, M., & Törner, M. (2017). The relationship between patient safety climate and occupational safety climate in healthcare—A multi-level investigation. *Journal of Safety Research*, 61, 187-198.
- Randles, B., Jones, B., Welcher, J., Szabo, T., Elliott, D., & MacAdams, C. (2010). The accuracy of photogrammetry vs. hands-on measurement techniques used in accident reconstruction (No. 2010-01-0065). SAE Technical Paper.
- Rose, A., & Rae, W. I. D. (2017). Perceptions of radiation safety training among interventionalists in South Africa. *Cardiovascular Journal of Africa*, 28(3), 196.
- Santos, D. G., de Medeiros, S. M., Chaves, A. E. P., de Sousa, Y. G., Silva, A. C. R., de Menezes, R. M. P., & de Araújo, M. S. (2016). Accidents by sharp instruments of nursing professionals in a hospital unit. *International Archives of Medicine*, 9.
- Sekaran, U., & Bougie, R. (2010). Theoretical framework in theoretical framework and hypothesis development. *Research Methods for Business: A Skill Building Approach*, 80.
- Shahian, D. M., Liu, X., Meyer, G. S., & Normand, S. L. T. (2014). Comparing teaching versus nonteaching hospitals: the association of patient characteristics with teaching intensity for three common medical conditions. *Academic Medicine*, 89(1), 94-106.
- Shang, K. C., & Lu, C. S. (2009). Effects of safety climate on perceptions of safety performance in container terminal operations. *Transport Reviews*, 29(1), 1-19.

- Siu, O. L., Phillips, D. R., & Leung, T. W. (2004). Safety climate and safety performance among construction workers in Hong Kong: The role of psychological strains as mediators. *Accident Analysis & Prevention*, 36(3), 359-366.
- Skjerve, A. B. (2008). The use of mindful safety practices at Norwegian petroleum installations. *Safety Science*, 46(6), 1002-1015.
- Stock, G. N., & McFadden, K. L. (2017). Improving service operations: Linking safety culture to hospital performance. *Journal of Service Management*, 28(1), 57-84.
- Strauch, B. (2016). Decision errors and accidents: Applying naturalistic decision making to accident investigations. *Journal of Cognitive Engineering and Decision Making*, 10(3), 281-290.
- Stricoff, R. S. (2000). Safety performance measurement: Identifying prospective indicators with high validity. *Professional Safety*, 45(1), 36.
- Subramaniam, C., Shamsudin, F. M., Mohd Zin, M. L. M., & Lazim, H. M. (2014, February). Do workplace safety practices influence safety compliance behaviour? Evidence among nurses in Malaysia. In *Proceedings of World Business and Economics Research Conference* (pp. 1-11).
- Takala, J., Hämäläinen, P., Nenonen, N. O. O. R. A., Takahashi, K., Chimed-Ochir, O., & Rantanen, J. O. R. M. A. (2017). Comparative analysis of the burden of injury and illness at work in selected countries and regions. *Cent. Eur. J. Occup. Environ. Med*, 23, 6-31.
- Thye, L. L. (2006). Leadership and the Development of OSH Culture. In *Proceeding of the 9th Conference and Exhibition on National Institute of Occupational Safety and Health (NIOSH)*.
- Toellner, J. (2001). Improving safety & health performance: Identifying & measuring leading indicators. *Professional Safety*, 46(9), 42.
- University Malaya Medical Centre. (2018). *Annual Reports*. Retrieved from <https://www.edu.my/ummc/annual-report.asp/keyid>
- Vecchio-Sadus, A. M. (2007). Enhancing safety culture through effective communication. *Safety Science Monitor*, 11(3), 1-10.
- Venkataraman, N. (2008). Safety performance factor. *International Journal of Occupational Safety and Ergonomics*, 14(3), 327-331.
- Vinodkumar, M. N., & Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention*, 42(6), 2082-2093.
- Vredenburg, A. G. (2002). Organizational safety: which management practices are most effective in reducing employee injury rates? *Journal of Safety Research*, 33(2), 259-276.

- Walters, D., & Nichols, T. (2006). Representation and consultation on health and safety in chemicals: An exploration of limits to the preferred model. *Employee Relations*, 28(3), 230-254.
- World Health Organization (2018). *Annual Reports*. Retrieved from <http://www.who.int/countries/mys/en/>
- Webb, D. A. (1994). The bathtub effect: Why safety programs fail. *Management Review*, 83(2), 51.
- Wu, T. C., Chang, S. H., Shu, C. M., Chen, C. T., & Wang, C. P. (2011). Safety leadership and safety performance in petrochemical industries: The mediating role of safety climate. *Journal of Loss Prevention in The Process Industries*, 24(6), 716-721.
- Xia, N., Griffin, M. A., Wang, X., Liu, X., & Wang, D. (2018). Is there agreement between worker self and supervisor assessment of worker safety performance? An examination in the construction industry. *Journal of Safety Research*, 65, 29-37.
- Xuesheng, D., & Xintao, Z. (2012). An empirical investigation of the influence of safety climate on safety citizenship behavior in coal mine. *Procedia Engineering*, 26, 2173-2180.
- Yang, C. C., Wang, Y. S., Chang, S. T., Guo, S. E., & Huang, M. F. (2009). A study on the leadership behavior, safety culture, and safety performance of the healthcare industry. *World Academy of Science, Engineering and Technology*, 53(1), 1148-1155.
- Zahoor, H., Chan, A., Utama, W., Gao, R., & Zafar, I. (2017). Modelling the relationship between safety climate and safety performance in a developing construction industry: A cross-cultural validation study. *International Journal of Environmental Research and Public Health*, 14(4), 351.
- Zhou, Q., Fang, D., & Wang, X. (2008). A method to identify strategies for the improvement of human safety behavior by considering safety climate and personal experience. *Safety Science*, 46(10), 1406-1419.
- Zikmund, W. G., & Babin, B. J. (2010). *Exploring marketing research* (10th edn) South-Western Cengage Learning.
- Zin, S. M., & Ismail, F. (2012). Employers' behavioural safety compliance factors toward occupational, safety and health improvement in the construction industry. *Procedia-Social and Behavioral Sciences*, 36, 742-751.
- Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, 85(4), 587.
- Zohar, D. (2002). The effects of leadership dimensions, safety climate, and assigned priorities on minor injuries in work groups. *Journal of Organizational Behavior*, 23(1), 75-92.

APPENDIX A

Participant Information Sheet

The Relationship Between Safety Management Practices and Safety Performance in University of Malaya Medical Centre

Dear Participant,

You are invited to participate in this research project describe below.

Aim:

The objective of this study is to determine whether safety management practices consisted of management commitment, workers participation, safety communication and feedback and safety training can affect the safety performance amongst nurses in the University of Malaya Medical Centre (UMMC).

The research team:

This study is being conducted by Nurul Hafizah Kamaliah bt Mohd Jamil as part of requirements for the Master of Science (Occupational Safety and Health management) at Universiti Utara Malaysia under the supervision of Prof. Madya Dr. Munauwar bin Mustafa.

Who is involved:

The target sample is all nurses worked in all 10 selected clinical departments in University of Malaya Medical Centre (UMMC).

Questionnaire:

The study uses a questionnaire to collect data to describe The Relationship between Safety Management Practices consisted of Management Commitment, Workers Participation, Safety Communication and Feedback and Safety Training and the Safety Performance amongst Nurses in the University of Malaya Medical Centre. This questionnaire contains three sections (48 questions). The first section is demographic and occupational information, the second section addresses the safety management practices and the third section addresses the safety performance of nurses involved.

Risk:

Participation in this study should involve no physical or mental discomfort. If, however you find it does, you have the right to leave the question.

Expected benefit:

There are no direct benefits to you for participating in this study. No incentives are offered. However, the results will have scientific interest that may eventually have benefits for University Malaya Medical Centre, especially among nurses involved.

Participation and withdrawal

Participation in this study is voluntary and you are free to withdraw from this study at any time without prejudice or penalty. If you wish to withdraw, do not complete the questionnaire.

Confidentiality and security of data:

All questionnaires and responses are anonymous and will be treated and store confidentially. The information you provide will be used only for the purpose of the study and only the research team will have access for the data.

Contacts:

For complaints that are not answered by the researcher, you can contact the study's principal supervisors, Prof. Madya Dr. Munauwar bin Mustafa on e-mail to munauwar@umm.edu.my

Thank you for your participation in this study.

Nurul Hafizah Kamaliah bt Mohd Jamil

Phone: (+60) 135161300

Email: fizakamaliah@gmail.com



Makluman untuk Peserta

Perhubungan antara Amalan Pengurusan Keselamatan dan Prestasi Keselamatan di Pusat Perubatan Universiti Malaya.

Peserta yang dihormati,

Anda dijemput untuk mengambil bahagian dalam kajian seperti yang diterangkan di bawah.

Tujuan:

Objektif kajian ini adalah untuk menerangkan perhubungan antara Amalan Pengurusan Keselamatan yang terdiri daripada Komitmen Majikan, Penglibatan Pekerja, Komunikasi dan Maklumbalas Keselamatan dan Latihan Keselamatan dengan Prestasi Keselamatan di kalangan jururawat di Pusat Perubatan Universiti Malaya.

Pasukan penyelidik:

Kajian ini dijalankan oleh Nurul Hafizah Kamaliah bt Mohd Jamil sebagai sebahagian daripada keperluan untuk Sarjana Sains (Pengurusan Keselamatan dan Kesihatan Pekerja) di Universiti Utara Malaysia di bawah pengawasan Prof. Madya Dr. Munauwar bin Mustafa.

Pihak terlibat:

Sasaran sampel adalah semua jururawat yang bekerja di dalam sepuluh jabatan klinikal yang terpilih di Pusat Perubatan Universiti Malaya

Soal Selidik:

Kajian ini menggunakan borang soal selidik untuk mengumpul data untuk menerangkan perhubungan antara Amalan Pengurusan Keselamatan yang terdiri daripada Komitmen Majikan, Penglibatan Pekerja, Komunikasi dan Maklumbalas Keselamatan dan Latihan Keselamatan dengan Prestasi Keselamatan di kalangan jururawat di Pusat Perubatan Universiti Malaya. Soal selidik ini mengandungi 3 bahagian (48 soalan). Bahagian pertama adalah maklumat demografi dan pekerjaan, bahagian kedua mengenai amalan pengurusan keselamatan dan bahagian ketiga mengenai prestasi keselamatan di kalangan jururawat-jururawat yang terlibat.

Risiko:

Penyertaan dalam kajian ini seharusnya tidak mengganggu kestabilan mental dan fizikal peserta. Namun jika berlaku perkara yang sebaliknya, peserta mempunyai hak untuk tidak menjawab kaji selidik ini.

Manfaat yang dijangkakan:

Tiada insentif yang ditawarkan untuk peserta yang mengambil bahagian dalam kajian ini. Walau bagaimanapun, hasil kajian akan mempunyai nilai saintifik yang akhirnya boleh memberi manfaat kepada Pusat Perubatan Universiti Malaya, terutamanya di kalangan jururawat-jururawat yang terlibat.

Penyertaan dan penarikan diri:

Penyertaan dalam kajian ini adalah secara sukarela dan anda bebas untuk menarik diri pada bila-bila masa tanpa prejudis atau penalti. Jika anda ingin menarik diri, sila kosongkan borang soal selidik.

Kerahsiaan dan keselamatan data:

Semua maklumat peserta akan dirahsiakan dan dianggap sulit. Maklumat yang anda berikan akan digunakan hanya untuk tujuan kajian dan hanya pasukan penyelidik yang mempunyai akses untuk data tersebut.

Kenalan:

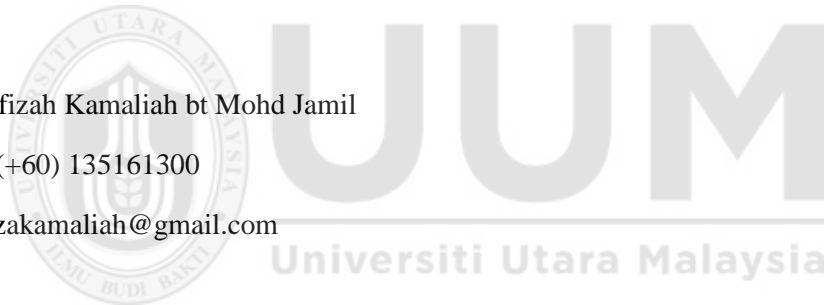
Untuk aduan yang tidak dijawab oleh penyelidik, anda boleh menghubungi penyelia utama kajian, Prof. Madya Dr. Munauwar bin Mustafa atau e-mel ke munauwar@umm.edu.my

Terima kasih atas penyertaan anda dalam kajian ini

Nurul Hafizah Kamaliah bt Mohd Jamil

Telefon: (+60) 135161300

E-mel: fizakamaliah@gmail.com



APPENDIX B

Consent Form

Borang persetujuan

Study title: The Relationship between Safety Management Practices and Safety Performance in University of Malaya Medical Centre.

Tajuk kajian: Perhubungan antara Amalan Pengurusan Keselamatan dan Prestasi Keselamatan di Pusat Perubatan Universiti Malaya.

Name of the Principal Investigator: Nurul Hafizah Kamaliah bt Mohd Jamil

Please check (✓) the box, if you agree with the statements given below:

Sila tandakan (✓) pada kotak yang jika anda bersetuju dengan kenyataan dibawah

- ☐ I have read and understood the information sheet provided by the researcher for this study.
Saya telah membaca dan memahami kenyataan bertulis yang disediakan oleh penyelidik.
- ☐ I have had the opportunity to ask questions about this study and these have been answered to my satisfaction.
Saya telah berpeluang menanyakan soalan tentang kajian ini dan telah dijawab seadanya.
- ☐ I understand that my participation is voluntary and that I can notify the examiner in writing and free to withdraw from the study at any point of time without my legal rights being affected.
Saya memahami bahawa penyertaan ini adalah suka rela dan saya boleh menarik diri dengan memaklumkan kepada penyelidik..
- ☐ I understand that relevant sections of any of my medical notes and data collected during the study will be kept confidential and will only be used for the purpose of this study.
Saya memahami bahawa setiap maklumat yang diberikan untuk kajian ini akan dirahsiakan dan hanya akan digunakan untuk tujuan kajian sahaja.
- ☐ I give my written consent to take part in this study.
Saya telah memberikan akuan bertulis untuk mengambil bahagian dalam kajian ini.

(If you haven't ticked any of the boxes above, please do not sign this form)

Jika anda tidak menanda semak salah satu daripada kotak diatas, sila tidak tandatangani borang ini.

.....
[.....]
Name of the Participant
Nama peserta

.....
(Nurul Hafizah Kamaliah bt Mohd Jamil)
Name of the Investigator
Nama penyelidik

APPENDIX C
QUESTIONNAIRE

SECTION A: DEMOGRAPHIC INFORMATION

Bahagian A: Latar Belakang Demografi Responden

Mark (/) where applicable.

Sila tandakan (/) pada ruang yang disediakan.

1. Gender / *Jantina*

☐

Male / *Lelaki*

☐

Female / *Wanita*

2. Age / *Umur*

☐

18 to 25 years old / *18-25 tahun*

☐

26 to 35 years old / *26 tahun hingga 35 tahun*

☐

36 to 45 years old / *36 tahun hingga 45 tahun*

☐

46 to 55 years old / *46 tahun hingga 55 tahun*

☐

Above 56 years old / *melebihi 56 tahun*

3. Highest Education / *Tahap Pendidikan Tertinggi*

☐

Primary School / *Sekolah Rendah*

☐

LCE / *PMR / SRP*

☐

MCE / *SPM*

☐

HSC / *STPM*

☐

Certificate / *Sijil*

☐

Diploma / *Diploma*

☐

Degree / *Sarjana Muda*

☐

Master / *Sarjana*

4. Ethnicity / *Kaum*

☐

Malay / *Melayu*

☐

Chinese / *Cina*

☐

Indian / *India*

Others / *Lain-lain*: _____ (Please specify)

5. Marital Status / *Status Perkahwinan*

☐

Married / *Berkahwin*

☐

Single / *Bujang*

☐

Divorced / *Berceraai*

6. How many years have you been working? *Berapa lamakah anda telah bekerja?*

☐ Less than 1 year / *Kurang dari 1 tahun*

☐ 1 – 5 years / *1 – 5 tahun*

☐ 6 – 10 years / *6 – 10 tahun*

☐ 11 – 15 years / *11 – 15 tahun*

☐ 16 – 20 years / *16 – 20 tahun*

☐ More than 21 years / *Lebih 21 tahun*

7. Have you ever had any occupational accident ever since you started working in this organization?

Adakah anda pernah mengalami kemalangan sepanjang menjalankan tugas di dalam organisasi ini?

☐ Yes / *Ya*

☐ No / *Tidak*

If yes, how many accidents have you had while working in this organization?

Jika ya, berapakah bilangan kemalangan yang telah anda alami sepanjang bekerja di dalam organisasi ini?

☐ 1 – 3

☐ 4 – 8

☐ 9 – 15

☐ Over 15

SECTION B- SAFETY MANAGEMENT PRACTICES

Bahagian B- Amalan Pengurusan Keselamatan

For each of the following statements, please circle according to your knowledge as an employee of this organization based on the following scale.

Bagi setiap pernyataan, sila bulatkan pilihan terbaik yang dapat menggambarkan pengetahuan anda sebagai pekerja di organisasi ini mengikut skala berikut.

Strongly Disagree <i>Sangat Tidak Bersetuju</i>	Disagree <i>Tidak Bersetuju</i>	Neutral <i>Neutral</i>	Agree <i>Bersetuju</i>	Strongly Agree <i>Sangat Bersetuju</i>
1	2	3	4	5

Management Commitment <i>Komitmen Majikan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Safety is given high priority by the management. <i>Pihak pengurusan memberi keutamaan yang tinggi kepada keselamatan.</i>	1	2	3	4	5
2. Safety rules and procedures are strictly followed by the management. <i>Peraturan dan prosedur keselamatan dipatuhi dengan tegas oleh pihak pengurusan.</i>	1	2	3	4	5
3. Corrective action is always taken when the management is told about unsafe practices. <i>Tindakan pembedulan sentiasa diambil oleh pihak pengurusan apabila tingkahlaku tidak selamat dilaporkan</i>	1	2	3	4	5

Management Commitment <i>Komitmen Majikan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. In my workplace, supervisors do not show interest in the safety of workers. <i>Di tempat kerja saya, penyelia tidak menunjukkan minat terhadap keselamatan pekerja.</i>	1	2	3	4	5
5. Management considers safety to be equally important as work production. <i>Pengurusan mengambil kira keselamatan seperti sama penting dengan penghasilan kerja.</i>	1	2	3	4	5
6. Members of the management do not attend safety meetings. <i>Ahli pengurusan tidak menghadiri mesyuarat keselamatan.</i>	1	2	3	4	5
7. I feel that management is willing to compromise on safety for increasing work production. <i>Saya merasakan bahawa pihak pengurusan sanggup berkompromi terhadap isu keselamatan demi meningkatkan penghasilan kerja</i>	1	2	3	4	5

Management Commitment Komitmen Majikan	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. When near-miss accidents are reported, my management acts quickly to solve the problem. <i>Apabila terjadi situasi yang hampir menyebabkan kemalangan, pihak pengurusan mengambil tindakan penyelesaian dengan segera.</i>	1	2	3	4	5
9. My organization provides sufficient personal protective equipment for the employees. <i>Organisasi saya menyediakan peralatan perlindungan keselamatan secukupnya kepada para pekerja</i>	1	2	3	4	5

Safety Training Latihan Keselamatan	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My organization gives comprehensive training to the employees in work place health and safety issues. <i>Organisasi saya memberi latihan komprehensif kepada pekerja tentang keselamatan di tempat kerja.</i>	1	2	3	4	5
2. Newly recruits are trained adequately to learn safety rules and procedure. <i>Pekerja baru dilatih dengan secukupnya tentang peraturan dan prosedur keselamatan.</i>	1	2	3	4	5
3. Safety issues are given high priority in training programs. <i>Isu-isu keselamatan diberi keutamaan dalam program latihan.</i>	1	2	3	4	5

Safety Training <i>Latihan Keselamatan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. I am not adequately trained to respond to emergency situations in my work place. <i>Saya tidak dilatih dengan secukupnya untuk bertindak balas terhadap situasi kecemasan di tempat kerja saya.</i>	1	2	3	4	5
5. Management encourages the employees to attend safety training programs. <i>Pihak pengurusan menggalakkan pekerja untuk menghadiri program latihan keselamatan.</i>	1	2	3	4	5
6. Safety training given to me is adequate to enable me to control hazards in workplace. <i>Latihan keselamatan yang diberikan kepada saya adalah mencukupi untuk membolehkan saya mengawal bahaya di tempat kerja.</i>	1	2	3	4	5

Workers Participation <i>Penglibatan Pekerja</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Management always welcomes opinion from employees before making final decisions on safety related matters. <i>Pihak pengurusan sentiasa mengalu-alukan pendapat daripada pekerja sebelum membuat keputusan akhir mengenai hal berkaitan keselamatan.</i>	1	2	3	4	5
2. My organization has safety committees consisting of representatives of management and employees. <i>Organisasi saya mempunyai jawatankuasa keselamatan yang diwakili oleh pihak pengurusan dan pekerja.</i>	1	2	3	4	5
3. Management promotes employees' involvement in safety related matters. <i>Pihak pengurusan menggalakkan penglibatan pekerja dalam perkara yang melibatkan isu keselamatan.</i>	1	2	3	4	5
4. Management consults with employees regularly about workplace health and safety issues. <i>Pihak pengurusan sentiasa berunding dengan pekerja dalam isu-isu keselamatan dan kesihatan di tempat kerja.</i>	1	2	3	4	5
5. Employees do not sincerely participate in identifying safety problems. <i>Pekerja tidak ikhlas mengambil bahagian dalam mengenal pasti masalah keselamatan.</i>	1	2	3	4	5

Safety Communication and Feedback <i>Komunikasi Keselamatan dan Maklumbalas</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My organization does not have a hazard reporting system where employees can communicate hazard information before incidents occur. <i>Organisasi saya tidak mempunyai sistem pelaporan bahaya di mana pekerja boleh menyampaikan maklumat berkaitan bahaya yang wujud sebelum sesuatu insiden berlaku.</i>	1	2	3	4	5
2. Management operates an open-door policy on safety issues. <i>Pihak pengurusan melaksanakan dasar terbuka mengenai isu keselamatan.</i>	1	2	3	4	5
3. There is sufficient opportunity to discuss and deal with safety issues in meetings. <i>Terdapat peluang yang cukup untuk membincangkan dan menangani isu keselamatan dalam mesyuarat.</i>	1	2	3	4	5
4. The target and goals for safety performance in my organization are not clear to the workers. <i>Sasaran dan matlamat untuk prestasi keselamatan dalam organisasi saya tidak jelas kepada pekerja.</i>	1	2	3	4	5
5. There are open communications about safety issues in this work place. <i>Terdapat komunikasi terbuka tentang isu-isu keselamatan di tempat kerja.</i>	1	2	3	4	5

SECTION C- SAFETY PERFORMANCE

Bahagian C- Prestasi Keselamatan

For each of the following statements, please circle according to your knowledge as an employee of this organization based on the following scale.

Bagi setiap pernyataan, sila bulatkan pilihan terbaik yang dapat menggambarkan pengetahuan anda sebagai pekerja di organisasi ini mengikut skala berikut.

Strongly Disagree <i>Sangat Tidak Bersetuju</i>	Disagree <i>Tidak Bersetuju</i>	Neutral <i>Neutral</i>	Agree <i>Bersetuju</i>	Strongly Agree <i>Sangat Bersetuju</i>
1	2	3	4	5

Safety Performance <i>Prestasi Keselamatan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I overlook safety procedure in order to get my task done more quickly. <i>Saya mengabaikan prosedur keselamatan semasa menyiapkan tugas dengan cepat.</i>	1	2	3	4	5
2. I follow all safety procedures regardless of the situation I am in. <i>Saya mematuhi kesemua prosedur keselamatan tanpa mengira keadaan saya.</i>	1	2	3	4	5
3. I handle all situations as if there is a possibility of having an accident. <i>Saya mengendalikan semua situasi seolah-olah ianya ada kemungkinan mengalami kemalangan.</i>	1	2	3	4	5

Safety Performance <i>Prestasi Keselamatan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. I wear safety equipment required by practice. <i>Saya memakai peralatan keselamatan yang diperlukan oleh amalan kerja.</i>	1	2	3	4	5
5. I always keep my work area clean. <i>Saya sentiasa memastikan kawasan kerja saya dalam keadaan bersih.</i>	1	2	3	4	5
6. I encourage coworkers to be safe. <i>Saya menggalakkan rakan sekerja untuk menjadi selamat.</i>	1	2	3	4	5
7. I always keep my work equipment safe. <i>Saya sentiasa memastikan peralatan kerja saya dalam keadaan selamat.</i>	1	2	3	4	5
8. I take shortcuts to safe working behaviors in order to get the job done faster. <i>Saya mengambil jalan pintas dari tingkah laku yang selamat untuk menyiapkan kerja dengan lebih cepat.</i>	1	2	3	4	5
9. I do not follow safety rules that I think are unnecessary. <i>Saya tidak mengikuti peraturan keselamatan yang saya rasa tidak perlu.</i>	1	2	3	4	5
10. I report safety problems to my supervisor when I see safety problems. <i>Saya melaporkan masalah keselamatan kepada penyelia apabila saya melihat masalah keselamatan.</i>	1	2	3	4	5

Safety Performance <i>Prestasi Keselamatan</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11. I correct safety problems to ensure accidents will not occur. <i>Saya memperbetulkan masalah keselamatan untuk memastikan kemalangan tidak berlaku.</i>	1	2	3	4	5
12. I help my co-workers when they are working under risky or hazardous condition. <i>Saya membantu rakan sekerja saya apabila mereka bekerja di bawah keadaan berisiko atau berbahaya.</i>	1	2	3	4	5
13. I always point out to the management if any safety related matters are noticed in my organization. <i>Saya selalu menunjukkan kepada pihak pengurusan sekiranya ada perkara berkaitan keselamatan yang dapat dilihat di dalam organisasi saya.</i>	1	2	3	4	5
14. I put extra effort to improve the safety of the workplace. <i>Saya berusaha keras untuk meningkatkan keselamatan tempat kerja.</i>	1	2	3	4	5
15. I volunteered to carry out tasks or activities that help to improve workplace safety. <i>Saya secara sukarela menjalankan tugas atau aktiviti yang membantu meningkatkan keselamatan di tempat kerja.</i>	1	2	3	4	5
16. I encourage my co-workers to work safely. <i>Saya menggalakkan rakan sekerja bekerja dengan selamat.</i>	1	2	3	4	5